R&D Scoping and Framing Workshop R&D Roadmap: Managing Western Water as Climate Changes February 20 and 21, 2008

Responsibilities, Challenges, and Needs Perspectives of Reclamation Environmental Compliance and Ecosystem Restoration Managers

Note: The information presented herein is intended solely to facilitate a working level dialogue between the federal scientific community, and Reclamation water and environmental resource managers, on climate change research needs in support of Western water management. As such, "this information has not been formally disseminated by the Bureau of Reclamation and should not be construed to represent any agency determination or policy". (1)

Generally describe your region's environmental compliance and ecosystem restoration responsibilities (this is meant to be a high level summary of your world):

Making sure that our programs, activities and projects comply with all applicable laws and regulations; and that we disclose reasonably foreseeable effects of them – plus identifying and pursuing opportunities for restoration when it furthers our mission.

Describe the decisions that your region makes associated with environmental compliance and restoration responsibilities that may be affected by climate change:

Our findings are generally associated with NEPA, i.e. FONSI's and ROD's; and with ESA compliance documents such as biological assessments and evaluations; and iscusions/analyses of indirect and cumulative impacts.

What are the primary scientific or non-scientific factors that typically govern these decisions? Water user needs; contractual obligations; legal requirements; tribal trust responsibilities; impact assessment; environmental stewardship; national environmental policy; and social considerations such as urbanization, population and industrial growth, water quality & supply

Who are the primary stakeholders affected by these decisions and summarize their primary concerns?

Agricultural water users – will sufficient water be available for sustainable/viable agricultural activities

Municipal water users – will sufficient water be available for people

Indian water users – will sufficient water be available for tribal rural water systems and natural resources

Recreationists – will sufficient water be available for river and reservoir recreation activities Industrial water users – will sufficient water be available for existing and future industrial use Environmental interests – will sufficient water be available for environmental protection and restoration/recovery

In general, list the top three wishes that you would like for the scientific community to provide for you, in support of your region's environmental compliance and ecosystem restoration responsibilities that are related to understanding and utilizing climate change information.

1. Potential long-term (40-100 years) trends of water availability on a river basin and/or project scale

1/ Stated in accordance with Information Quality Act (Public Law 106-554), Final Information Quality Bulletin for Peer Review (Office of Management and Budget, December 16, 2004).

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- 2. Potential direct, indirect and cumulative environmental effects of that (change) in availability
- 3. Tool box of scientific info that could support a credible impact assessment and opportunities for mitigation of climate change impacts and opportunities for activities to offset such impacts.

Are there current or emerging "project-specific applications" in your region where answers to these three wishes may be beneficial to you in the near-term?

Yes – Yellowtail/Bighorn lake operations in MT/WY; Red River Valley Water Supply Project; Colorado Front Range water supply and demand trends, issues and opportunities – i.e. long-term climate change v. urbanization